Enclosure 1

APPROVED TMDLS

17 TMDLs
5 Determinations that no TMDL is needed
4 TMDLs yet to be developed

Waterbody Name*	**TMDL Parameter/ Pollutant (*based on 1996 and 2002 lists*)**	**Water Quality Goal/Endpoint**	**TMDL**	**WLA LA**	**Supporting Documentation** (not an exhaustive list of supporting documents)
Upper Sun River* MT41K001_010	thermal modification*	75^{O}F Daily max 73^{O}F Daily max during 3 consecutive days 66^{O}F 7-day avg. temp	**TMDL** (daily) (kilocalories/second) = Flow (cfs) x 676 **TMDL** (weekly) = Flow (cfs) x 32351	**WLA** (Vaugn POTW MT0021440) = no increase in thermal load **LA =** increase shading by 22% plus grazing/irrigation BMPs	Water Quality Restoration Plan and Total Maximum Daily Loads for the Sun River Planning Area; December 2004; Montana DEQ SSTEMP and SSTEMP models used
	siltation*	eroding banks < 10% entrenchment ratio 1.4 - 2.2 14 clinger taxa % of sample filter feeders <20% less than 10 mg/l at flows less than 200 cfs	**TMDL** = 35,454 tons/year	**WLA** = 28 tons/year (no reasonable potential) **LA** = 35,426 tons/year	" "
	suspended sediment*	" "	" "	" "	" "
	nutrients*	Justification provided for no need of a nutrient TMDL. Water quality standards being met.			" "

Waterbody Name*	**TMDL Parameter/ Pollutant (*based on 1996 and 2002 lists*)**	**Water Quality Goal/Endpoint**	**TMDL**	**WLA LA**	**Supporting Documentation** (not an exhaustive list of supporting documents)
Lower Sun River* MT41K001_020	thermal modification*	Justification provided for no need of a thermal TMDL. Water quality standards being met.			" "
	siltation*	eroding banks < 10% suspended sediment concentration < 42 mg/l (75 percentile)	**TMDL** = 76,938 tons/year	**WLA** = 33 tons/year (no reasonable potential) **LA** = 76,905 tons/year	" "
	suspended sediment*	" "	" "	" "	" "
	TDS*	Justification provided for no need of a TDS TMDL. Water quality standards being met.			" "
	nutrients* (nitrogen)	total nitrogen = 650 ug/l	**TMDL** (lbs/day) = 2.959 x flow (cfs)	**WLA** = 10% of TMDL **LA** = 57% reduction	" "
	nutrients* (phosphorus)	total phosphorus = 50 ug/l	**TMDL** (lbs/day) = 0.269 x flow (cfs)	**WLA** = 10% of TMDL **LA** = 45% reduction	" "

Waterbody Name*	**TMDL Parameter/ Pollutant (*based on 1996 and 2002 lists*)**	**Water Quality Goal/Endpoint**	**TMDL**	**WLA LA**	**Supporting Documentation** (not an exhaustive list of supporting documents)
Muddy Creek* MT41K002_010	thermal modification*	75^{O}F Daily max 73^{O}F Daily max during 3 consecutive days 66^{O}F 7-day avg. temp	**TMDL** (daily) (kilocalories/second) = Flow (cfs) x 676 **TMDL** (weekly) (megacalories/week) = Flow (cfs) x 32351	**WLA** = 0 **LA** = irrigation BMPs	" "
	suspended sediment*	Proper Functioning Condition for 85% of stream length Sheer stress comparable to Rosgen C or E channel	**TMDL** = 29,959 tons/year (3 year average)	**WLA** = 0 **LA** = 29,959 tons/year	" "
	TDS*	960 mg/l year round 660 mg/l (May 1-Sep 30) SAR < 4.5 (May -Sept)	**TMDL** (1000lbs/day) = Flow (cfs) x 5.164	**WLA** = 0 **LA** = no increase (irrigated crop) 20% decrease (fallow crop)	" "
	nutrients* (nitrogen)	total nitrogen = 650 ug/l	**TMDL** (lbs/day) = 3.497 x flow (cfs)	**WLA** = 0 **LA** = 66% reduction	" "
	nutrients* (phosphorus)	total phosphorus = 50 ug/l	**TMDL** (lbs/day) = 0.269 x flow (cfs)	**WLA** = 0 **LA** = 83% reduction	
	pH*	Justification provided for no need of a pH TMDL. Water quality standards being met.			" "
	selenium (not on list)	5 ug/l chronic aquatic life 20 ug/l acute aquatic life 50 ug/l human health	**TMDL** (lbs/day) = 0.0269 x flow (cfs)	**WLA** = 0 **LA** = 35% reduction Feb-Apr	

Waterbody Name*	**TMDL Parameter/ Pollutant (*based on 1996 and 2002 lists*)**	**Water Quality Goal/Endpoint**	**TMDL**	**WLA LA**	**Supporting Documentation** (not an exhaustive list of supporting documents)
Ford Creek* MT41K002_020	siltation*	55% shrub species cover at bank full Rosgen C channel BEHI < 10 entrenchment ratio > 2.6 14 clinger taxa	**TMDL** = 966 tons/year	**WLA** = 0 **LA** = 966 tons/year	" "
	nutrients* (nitrogen)	Justification provided for no need of a nutrient TMDL. Water quality standards being met.			" "
Freezeout Lake* MT41K004_030	TDS*	2,264 mg/l TDS	**TMDL** = 155,056 lbs/day TDS	**WLA** (Farifield POTW MTG580003) = 1130 lb/day **LA** = grazing/irrigation BMPs	" "
	sulfates* (sulfates included in TDS)	" "	" "	" "	
	nitrogen*	Further study needed. Waterbody/pollutant stays on 303d list.			" "
	organic enrichment/DO*	Further study needed. Waterbody/pollutant stays on 303d list.			" "

Waterbody Name*	**TMDL Parameter/ Pollutant (*based on 1996 and 2002 lists*)**	**Water Quality Goal/Endpoint**	**TMDL**	**WLA LA**	**Supporting Documentation** (not an exhaustive list of supporting documents)
	metals* (selenium)	5 ug/l chronic aquatic life 20 ug/l acute aquatic life 50 ug/l human health	**TMDL** = 0.55 lbs/day	**WLA** (Farifield POTW MTG580003) = 0.02 lb/yr **LA** = 5 lb/yr fallow crop 35 lb/yr irrigated land	" "
Gibson Reservoir* MT41K004_020	siltation*	Further study needed. Waterbody/pollutant stays on 303d list.			" "
	suspended sediment*	Further study needed. Waterbody/pollutant stays on 303d list.			" "
Willow Creek Reservoir* MT41K004_020	Non-pollutant impairment; no TMDL required				

* An asterisk indicates the waterbody and pollutant were included on the State's Section 303(d) list of waterbodies in need of TMDLs.